10/8/4 447

Claim 25 (previously presented): The Gm-C filter defined in Claim 24, wherein the first cutoff frequency is substantially equal to the second cutoff frequency.

Claim 26 (previously presented): The Gm-C filter defined in Claim 24, wherein the first compensation resistance is effective to compensate for a bandwidth limitation of the first OTA device and the second compensation resistance is effective to compensate for a bandwidth limitation of the second OTA device.

Claim 27 (currently amended): The Gm-C filter defined in Claim 24, wherein the first reactive device comprises a first capacitor and [[a]] the second reactive device comprises a second capacitor.

Claim 28 (previously presented): The Gm-C filter defined in Claim 27, wherein the first compensation resistance comprises a first compensation resistor having a first resistance value that is inversely proportional to the tangent of a phase-shift at a first compensation frequency and wherein the second compensation resistance comprises a second compensation resistor having a second resistance value that is inversely proportional to the tangent of a phase-shift at a second compensation frequency.

Claim 29 (previously presented): The Gm-C filter defined in Claim 28, wherein, at the compensation frequency, the first resistance value is inversely proportional to a capacitance value of the first capacitor and the second resistance value is inversely proportional to a capacitance value of the second capacitor.

Claim 30 (previously presented): The Gm-C filter defined in Claim 28, wherein the Gm-C filter circuit exhibits at least a  $Q_{max}$  and a  $Q_{min}$  and wherein the first compensation frequency is selected to correspond to the  $Q_{max}$ .

Claim 31 (original): The Gm-C filter defined in Claim 29, wherein the first OTA device and the second OTA device each comprise:

a first OTA having differential inputs and differential outputs: and